

CLAIMS

1. A drum comprising a fixed cylindrical body (1) with perforated lateral surface surrounded by a holed roll (4) driven in rotation relative to the axis (O) of the cylindrical body (1), and means (7) intended to create a partial vacuum inside the body (1), characterized by a water-impermeable partition (13, 14) subdividing the interior of the body (1) into two compartments (16, 17) delimited by the partition (13, 14) and respectively by a first (15) and a second portion of the lateral surface and both (16, 17) placed under partial vacuum by the means (7) intended to create same.

2. The drum as claimed in claim 1, characterized in that it is associated with a conveyor (22) tangential to the drum (24) at a point of contact and the first compartment (16) begins opposite the point of contact and ends opposite a point of the lateral surface downstream, in the direction of rotation of the sleeve (4), of the point of contact.

3. The drum as claimed in claim 2, characterized in that the first compartment (16) extends over a sector of the body (1).

4. The drum as claimed in one of claims 1 to 3, characterized by means specific to each compartment (16, 17) intended to create a partial vacuum.

5. The drum as claimed in one of claims 1 to 4, characterized in that the ratio of the total area of the perforations, per unit of surface, to the area of the lateral surface on which they lie is greater for the first compartment (16) than for the second (17).

6. The drum as claimed in one of claims 1 to 5, characterized by a pressurized water injector (8, 9) on the portion of the roll (4) which passes opposite the portion of the lateral surface of the compartment (17).

7. The drum as claimed in claim 6, characterized in that the water injector is disposed angularly in a manner immediately adjacent to the first compartment (26).

8. A production unit for a nonwoven material, comprising a spunbond tower (21) with conveyor (22) leading to a drum (24), characterized in that the drum is as defined in the preceding claims.

9. The installation as claimed in claim 8, characterized in that the tower (21) conveyor (22) and the tangential conveyor are one and the same conveyor.

10. The installation as claimed in claim 8 or 9, characterized in that the drum (24) is mounted directly downstream of the tower, that is to say without interposition of a device causing the drawing of the material.

5 11. A method of producing a nonwoven material, characterized in that an installation as claimed in one of claims 8 to 10 is used and the speed of the tower conveyor (22) and/or of the tangential conveyor is greater than the linear speed of the drum (24).

10 12. A nonwoven material, characterized in that the ratio of the breaking strength in the machine direction to that in the cross direction is less than 1.2 and in particular approximately 1.

13. The nonwoven material as claimed in claim 12, characterized in that said ratio is less than 1.